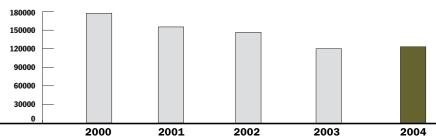
Freeway Congestion

Rebounding Economy Prompts Rise in Freeway Congestion; 2 Percent Increase Ends Three-Year Decline

- Traffic congestion on Bay Area freeways increased in 2004 for the first time since 2000. The daily number of vehicle hours of delay due to congestion in the nine-county region rose by 2 percent in 2004, after dropping 18 percent in 2003, 5 percent in 2002 and 12 percent in 2001.
- The increase in congestion likely reflects the increased level of economic activity in the Bay Area in 2004. This same correlation between the economy and congestion may be borne out by the 2005 congestion statistics, which are expected to be available early in 2006.

Daily Freeway Delay by Bay Area County, 2000-2004

	Eroowov		Daily (We	Percent Change				
	Freeway Miles (2004)	2000	2001	2002	2003	2004	2003–2004	2000–2004
Alameda	138	61,700	65,600	61,300	46,300	50,540	+9%	-18%
Santa Clara	137	51,700	37,000	31,600	24,300	22,910	-6%	-56%
Contra Costa	87	16,200	18,800	19,400	18,700	18,520	-1%	+14%
San Francisco	19	12,500	8,500	11,400	11,200	8,860	-21%	-29%
San Mateo	73	18,100	10,900	7,700	7,300	7,800	+7%	-57%
Marin	28	9,900	7,900	8,400	6,200	7,410	+20%	-25%
Sonoma	55	4,300	4,400	4,400	5,200	5,320	+2%	+24%
Solano	79	3,200	2,400	3,700	2,600	2,830	+9%	-12%
Napa	5	0	0	0	0	0	n/a	n/a
Bay Area	621	177,600	155,500	147,900	121,800	124,190	+2%	-30%

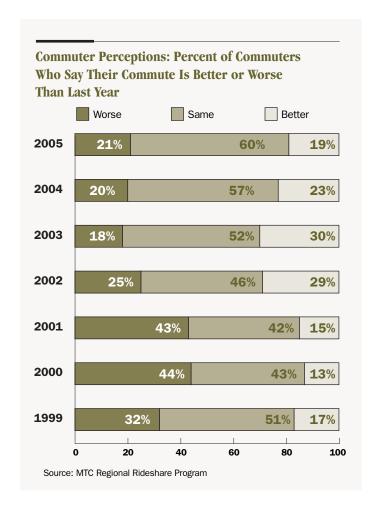


Source: Metropolitan Transportation Commission, Caltrans District 4

- Regionwide, vehicles typically spent 124,190 hours per weekday in congested conditions (defined as average speeds below 35 miles per hour for 15 minutes or longer) on Bay Area freeways in 2004. While this marks a 2 percent increase over 2003 figures, it is far below the 177,600 hours per day recorded in 2000 at the height of the region's technology-charged economic boom.
- The biggest overall increase in freeway congestion occurred in Alameda County, where daily vehicle hours of delay grew by over 4,000 to 50,540. The biggest percentage increase came in Marin County, where daily vehicle hours of delay rose to 7,410 in 2004 from 6,200 the year before a 20 percent surge. Smaller percentage increases were registered in Alameda, San Mateo, Solano and Sonoma counties.
- Congestion declined by 21 percent on San Francisco freeways, and smaller dips were recorded in Contra Costa and Santa Clara counties.

Top 10 Bay Area Congestion Hot Spots

- The morning approach to the Bay Bridge on Interstate 80 remained the region's most notorious congestion location in 2004 with daily vehicle hours of delay up a whopping 53 percent from 6,570 hours in 2003 (see page 10). Three of the Bay Area's 10 worst congestion locations now involve the Bay Bridge, including the morning approach along westbound Interstate 80 (a segment that also carries traffic bound for eastbound Interstate 580 and southbound Interstate 880), the eastbound afternoon commute across the span (number 10) and the afternoon approach on eastbound Interstate 80 and northbound U.S. 101 in San Francisco (number 4).
- Interstate 580 in Alameda County is another corridor with multiple high-congestion segments. The morning drive westbound from North Flynn Road at the top of the Altamont Pass to Airway Boulevard in Livermore ranked second on the Bay Area congestion list for 2004, and the afternoon eastbound drive from Hopyard Road in



Freeway Congestion (continued)

Pleasanton to El Charro Road came in at number 3. These routes tied for the third spot on the 2003 list.

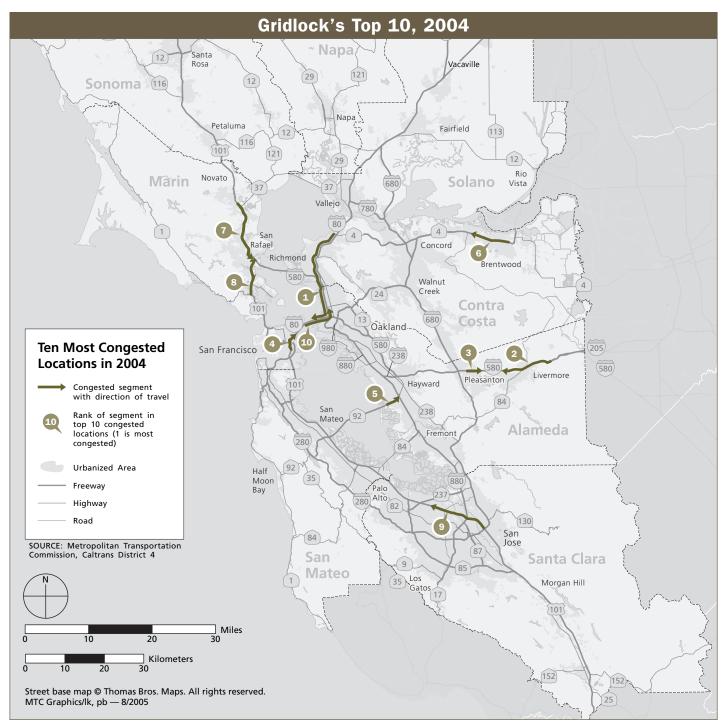
- One commute returned to the top 10 list after a lengthy absence. The afternoon commute along eastbound State Route 92 from Clawiter Road to Interstate 880 in Hayward climbed to number 6 on the list from number 15 in 2003, marking this segment's first appearance on the top 10 list since the height of the high-tech boom in 2000.
- Newcomers to the list for 2004 include the afternoon drive

from Mill Valley to San Rafael on U.S. 101 (number 8), the morning drive along northbound U.S. 101 in San Jose from Interstate 280 to Trimble Road (number 9) and the afternoon Bay Bridge commute on eastbound Interstate 80 from west of the Yerba Buena Island tunnel out past the Powell Street exit in Emeryville (number 10).

Bay A	rea Freeway Locations With Most Delay During Commute Hours, 2004	0004 B-ile				
2004 Rank	Location	2004 Daily (Weekday) Vehicle Hours of Delay	2003 Rank	2002 Rank		2000 Rank
1	Interstate 80, westbound, a.m. — Alameda/Contra Costa County State Route 4 to Bay Bridge metering lights	10,080	1	1	1	1
2	Interstate 580, westbound, a.m. — Alameda County North Flynn Road to Airway Boulevard	5,120	3	5	12	14
3	Interstate 580, eastbound, p.m. — Alameda County Hopyard Road to west of El Charro Road	4,320	3	3	5	13
4	U.S. 101, northbound and Interstate 80, eastbound, p.m. — San Francisco Cesar Chavez Street to west end of Bay Bridge	3,840	2	4	4	5
5	Route 92, eastbound, p.m. — Alameda County Clawiter Road to I-880 interchange	3,760	15	35	11	8
6	Route 4, westbound, a.m. — Contra Costa County Lone Tree Way to west of Loveridge Road	3,600	5	7	15	32
7	U.S. 101, southbound, a.m. — Marin County North of Route 37 to Interstate 580	3,110	6	9	8	6
8	U.S. 101, northbound, p.m. — Marin County Route 1 to north of Interstate 580	2,680	20	16	22	22
9	U.S. 101, northbound, a.m — Santa Clara County Interstate 280 to north of Trimble Road	2,560	14	14	42	19
10	Interstate 80, eastbound, p.m. — San Francisco and Alameda counties West of Treasure Island to east of Powell Street	2,430	18	38	34	41

Sources: Metropolitan Transportation Commission, Caltrans District 4

Rankings are for routes in which continuous stop-and-go conditions occur with few, if any, breaks in the queue. Thus, corridors that have equally severe delays, but where congestion is broken into several segments, may rank lower in this type of congestion listing.



Appendix B:

Congested Freeway Locations – Morning and Evening Commutes, 2004

Morning Peak-Period Congested Locations, 2004 (ordered by county and route)

COUNTY	ROUTE	DIR.	DAILY DELAY (vehicle hours)	DURATION (AM)	LOCATION
ALA	24	Ε	730	6:35–9:45	East of Route 13 to Gateway Boulevard
ALA	24	W	150	7:55–9:00	North of Telegraph Avenue to I-580
ALA/CC	80	W	10,080	5:50-10:25	Route 4 to Bay Bridge metering lights
ALA	84	S	80	5:30-9:30	At Dumbarton Bridge toll plaza*
ALA	92	W	130	7:50-9:20	At San Mateo-Hayward Bridge toll plaza*
ALA	238	N	260	5:50-8:55	I-580 to south of I-880 southbound off-ramp*
ALA	238	S	70	7:15–8:15	I-880 to south of Castro Valley Boulevard*
ALA/CC	580	Е	110	6:50-9:25	Central Avenue to Buchanan Street*
ALA	580	W	430	5:43-7:15	East of I-205 interchange to west of Grant Line Road
ALA	580	W	5,120	5:55-9:05	North Flynn Road to west of Airway Boulevard
ALA	580	W	360	6:45-9:15	Hopyard Road to I-680*
ALA	580	W	380	6:25-8:10	Strobridge Avenue to Route 238*
ALA	580	W	250	7:10-8:50	35th Avenue to east of Lakeshore
ALA	580	W	250	7:35-9:20	Route 24 interchange to I-80 interchange
ALA	680	N	130	7:50-9:00	At I-580 and at Alcosta Boulevard*
ALA	880	N	2,190	6:20-9:30	West Grand Avenue to south of Maritime Street
ALA	880	N	540	6:50-8:30	Decoto Road to south of Tennyson Road
ALA	880	N	170	7:35–9:10	Route 92 to south of Hesperian Boulevard*
ALA	880	N	220	7:15–9:50	Route 238 to Davis Street and at Hegenberger Road*
ALA	880	N	280	7:50-9:00	Hegenberger Road to High Street*
ALA	880	S	1,860	6:55–10:25	Stevenson Boulevard to Mission Boulevard
ALA	880	S	700	8:20-10:00	Industrial Parkway to Stevenson Boulevard
ALA	880	S	1,240	7:45–10:20	South of Marina Boulevard to Route 92
CC	4	W	420	6:45–8:45	Bailey Road to Willow Pass Road*
CC	4	W	3,600	5:20-9:18	Lone Tree Way to west of Loveridge Road
CC	24	W	70	6:35-8:15	Camino Pablo to Gateway Boulevard
СС	24	W	220	7:35–9:05	I-680 to east of Laurel Drive*
СС	242	S	100	6:45–8:30	Concord Avenue to I-680*
CC	580	W	270	6:15–8:55	Marine Street undercrossing to Richmond-San Rafael Bridge toll plaza*
CC	680	N	290	7:40-8:50	South of Crow Canyon Road to El Pintado Road

^{*} Segment monitored in 2003

Morning Peak-Period Congested Locations, 2004 (continued)

COUNTY	ROUTE	DIR.	DAILY DELAY (vehicle hours)	DURATION (AM)	LOCATION
СС	680	S	1,220	7:00-9:10	North of South Main Street to north of El Pintado Road
CC	680	S	820	6:25-8:50	Willow Pass Road to Geary Road
СС	680	S	540	8:40-8:20	Benicia-Martinez Bridge toll plaza to Contra Costa Boulevard
MRN	101	S	3,110	6:40-9:35	North of Route 37 to I-580
SCL	17	N	150	7:45-8:40	North of Camden Avenue*
SCL	85	N	210	6:40-9:20	At Bernal Road on-ramp (metering lights)*
SCL	85	N	390	7:10-9:15	Almaden Expressway to Union Avenue*
SCL	85	N	470	7:10-9:50	Route 17 to Saratoga Avenue*
SCL	85	N	120	7:20-8:45	North of Saratoga Avenue and at De Anza Boulevard*
SCL	85	N	510	7:00-9:45	I-280 to El Camino Real and at U.S. 101*
SCL	87	N	100	8:50-10:00	Curtner Avenue to Almaden Expressway*
SCL	101	N	340	6:15-7:35	South of San Martin Avenue to south of Cochrane Road
SCL	101	N	950	6:40-8:50	North of Bernal Road to north of Tully Road
SCL	101	N	2,560	6:35-9:55	I-280 to north of Trimble Road
SCL	101	N	380	7:30-9:15	Ellis Street to Route 85*
SCL	101	N	300	6:40-9:10	At San Antonio Road*
SCL	237	Ε	180	7:50-9:20	At Mathilda Avenue and at I-880 southbound off-ramp connector*
SCL	237	W	340	7:20-9:10	I-880 split to Zanker Avenue*
SCL	280	N	150	7:15-8:15	U.S. 101 to Reed Street*
SCL	280	N	410	6:50-9:10	Meridian Avenue to I-880*
SCL	680	N	60	7:40-8:20	Capitol Expressway to McKee Road*
SCL	680	S	200	7:40-8:45	At U.S. 101*
SCL	880	N	90	7:15-9:30	North First Street to Brokaw Road
SCL	880	S	50	7:40-8:40	Montague Expressway to Brokaw Road*
SF	80	Е	1,180	7:10-10:10	U.S. 101 to Sterling Street
SF	80	W	430	7:55-9:20	East of Treasure Island to Fremont Street
SF	101	N	310	7:15–9:05	North of Cesar Chavez Street to Mission Street
SF	101	S	10	6:55–8:00	At I-80*
SF	280	N	280	6:40-8:15	Alemany Boulevard to U.S. 101*
SF	280	N	180	7:30–9:15	Mariposa Street to King Street*
SM	101	N	600	7:30-9:30	Willow Road to Woodside Road*
SM	101	N	1,530	7:10-9:25	Route 92 interchange to Third Avenue

^{*} Segment monitored in 2003

Morning Peak-Period Congested Locations, 2004 (continued)

COUNTY	ROUTE	DIR.	DAILY DELAY (vehicle hours)	DURATION (AM)	LOCATION
SM/SCL	101	S	1,370	7:20-9:20	North of Marsh Road to Route 85 interchange
SM/SCL	101	N	110	7:10-9:45	At University Avenue
SM	101	S	1,170	7:05–9:25	North of Route 92 to Marine Parkway
SM	280	S	290	7:15–8:50	Route 1 to Avalon Drive*
SOL/SON	37	W	70	6:40-9:40	At Skaggs Island Road and at Sonoma/Solano county line*
SOL	37	W	220	6:10-8:15	Mare Island Interchange to post mile 6 and post mile 4 to Skaggs Island*
SOL	80	W	320	5:50-7:45	Solano Avenue to Carquinez Bridge toll plaza*
SOL	80	W	350	6:15-8:20	Abernathy Road to west of Route 12*
SON	101	N	370	7:20-9:10	Route 116 to Golf Road and Hearn Avenue to College Avenue*
SON	101	S	990	5:35-8:20	South of Redwood Highway to north of Kastania Road
SON	101	S	80	7:25–8:50	End of HOV lane to Wilfred Avenue*
SON	101	S	430	7:10-9:10	Airport Boulevard to south of River Road*

^{*} Segment monitored in 2003

Evening Peak-Period Congested Locations, 2004 (ordered by county and route)

COUNTY	ROUTE	DIR.	DAILY DELAY (vehicle hours)	DURATION (PM)	LOCATION
ALA	24	Е	1,730	3:40-6:40	I-580 to Caldecott Tunnel
SF/ALA	80	Е	2,430	2:35-7:00	West of Treasure Island to east of Powell Street
ALA	80	Е	2,150	3:10-6:25	I-580 interchange to Gilman Street
ALA/SF	80	W	2,180	4:20-7:00	At Bay Bridge toll plaza and incline section of Bay Bridge to Fifth Street*
ALA	80	W	1,250	2:20-5:35	Gilman Street to south of I-580 interchange
ALA	84	N	160	3:25-6:15	Newark Boulevard to I-880*
ALA	92	Е	3,760	3:35-7:55	Clawiter Road to I-880 interchange
ALA	238	N	190	2:50-6:45	I-580 to south of I-880*
ALA	238	S	450	3:45-6:35	I-880 to Castro Valley Boulevard*
ALA	580	Е	2,370	3:25-7:20	East of Livermore to east of Greenville Road*
ALA	580	Е	4,320	2:55-6:40	Hopyard Road to west of El Charro Road*
ALA	580	Е	450	5:00-6:15	Route 24 to Coolidge Avenue
ALA	580	W	40	3:20-5:55	Strobridge Avenue to Route 238
ALA	680	N	660	3:15-6:15	Route 262 to Washington Avenue*
ALA	880	N	1,730	4:50-5:50	Thornton Avenue to north of Fremont Boulevard
ALA	880	N	220	4:05-5:50	Mowry Avenue to south of Route 84*
ALA	880	N	1,420	3:25-6:45	Route 84 to Industrial Boulevard*
ALA	880	N	470	4:25-6:35	At A Street and at Route 238 interchange*
ALA	880	N	270	3:15-4:15	North of Coliseum Way to north of High Street
ALA	880	S	390	3:45-6:30	North of Route 92 to Route 84
ALA	880	S	420	4:00-6:25	At Hesperian Boulevard and A Street to Route 92*
ALA	880	S	410	4:45–6:15	Hegenberger to 98th Avenue and Davis Street to Marina Boulevard and at Route 238*
ALA	880	S	370	4:45–6:15	Oak Street to Embarcadero and at Fruitvale Avenue and at 42nd Avenue*
CC	4	Е	990	4:05–6:05	Pacheco Boulevard to east of Port Chigago Highway
CC	4	Е	2,340	3:35–6:55	East of Bailey Road to East of Somersville Road
CC	24	Е	190	3:50-6:00	At Acalanes and at I-680*
CC	24	W	820	4:05-6:30	West of Camino Pablo to Fish Ranch Road
CC/ALA	80	Е	530	4:00-6:30	Buchanan Street to San Pablo Avenue*
CC	80	Е	250	4:25-6:00	El Portal Road to Pinole Valley Road*
СС	680	N	620	4:00-6:35	North of Bollinger Canyon Road to Sycamore Valley Road*
* Segment mon	itored in 2003				

^{*} Segment monitored in 2003

Evening Peak-Period Congested Locations, 2004 (continued)

COUNTY	ROUTE	DIR.	DAILY DELAY (vehicle hours)	DURATION (PM)	LOCATION
СС	680	N	710	3:30-6:00	El Pintado Road to north of Livorna Road*
СС	680	N	1,040	4:15-5:50	Livorna Road to north of North Main Street
СС	680	N	980	4:40-6:05	Burnett Avenue to Concord Avenue
СС	680	S	330	4:55-6:25	Route 24 to north of Livorna Road
MRN	101	N	2,680	3:05-5:55	Route 1 to north of I-580*
MRN	101	N	550	3:20-6:25	Atherton Avenue to north of beginning of expressway*
MRN	101	N	300	3:15-6:25	North of San Antonio Road*
MRN	101	S	180	4:30-6:55	South of Waldo Tunnel to San Francisco county line*
MRN	580	W	590	2:40-6:50	Bellam Road to U.S. 101*
SCL	17	S	100	4:20-6:00	North of Hamilton Avenue*
SCL	85	S	30	5:40-6:50	At Route 87*
SCL	85	S	280	4:20-6:45	Route 17 to south of Union Avenue*
SCL	85	S	490	3:40-6:50	Stevens Creek Boulevard to De Anza Boulevard*
SCL	85	S	720	4:45-6:55	Evelyn Avenue to south of Fremont Avenue
SCL	87	S	1,470	2:50-6:25	North of Julian Street to Lelong Street
SCL	101	N	560	4:10-6:20	University Avenue to Ellis Street
SCL	101	S	1,500	3:30-6:35	Julian Street/McKee Road to Capitol Expressway
SCL	101	S	1,940	3:35-5:55	North of San Tomas Expressway to south of 13th Street
SCL	101	S	2,370	3:55-7:10	University Avenue to south of Shoreline Boulevard
SCL	237	Е	220	3:30-7:10	Great America to North First Street
SCL	237	Е	400	3:30-7:10	At I-880 connector*
SCL	237	W	340	5:00-6:45	McCarthy Boulevard to North First Street and Mathilda Avenue to U.S. 101*
SCL	280	S	530	4:50-6:30	Moorpark Avenue East to 11th Street*
SCL	280	S	310	4:45-6:40	At De Anza Boulevard and at Saratoga Avenue*
SCL	280	S	140	5:10-6:30	El Monte Road to north of Magdalena Avenue*
SCL	680	S	400	5:10-6:10	North of Calaveras Road to south of Berryessa Road
SCL	880	N	1,400	4:00-7:10	Montague Expressway to north of Dixon Landing Road*
SCL	880	S	190	5:10-6:50	U.S. 101 to First Street and Route 82 to north of Bascom Avenue*
SCL	880	S	1,400	4:00-7:10	Montague Expressway to north of Dixon Landing Road
SF	80	Е	3,470	2:30-7:25	U.S. 101 to Sterling Street
SF	80	W	410	3:55–6:45	5th Street to U.S. 101

^{*} Segment monitored in 2003

Evening Peak-Period Congested Locations, 2004 (continued)

COUNTY	ROUTE	DIR.	DAILY DELAY (vehicle hours)	DURATION (PM)	LOCATION
SF	101	N	370	4:35-6:20	South of Cesar Chavez Street to I-80
SF	101	S	1,060	4:20-7:10	South Van Ness Avenue to north of 10th Street and I-80 to Cesar Chavez Street
SF	280	S	260	4:30-6:15	U.S. 101 to Alemany Boulevard*
SF	280	S	150	4:50-6:30	Mariposa Street to Pennsylvania Avenue*
SM	92	W	80	5:15–6:15	U.S. 101 to Delaware Street*
SM	101	Ν	1,470	4:40-6:55	South of Holly Street to Route 92
SM	101	N	420	4:55–6:35	Route 92 to Third Avenue and Anza Boulevard to north of Broadway
SM	101	S	50	4:50-5:50	At Woodside Road and at Willow Street*
SM	101	S	310	3:30-6:30	At Poplar Avenue*
SM	101	S	200	3:20-6:00	Millbrae Avenue to Bridgeway*
SM	280	N	210	5:30-6:30	Sandhill Road to Woodside Road and north of Woodside Road*
SM	280	N	160	5:20-6:40	I-380 to Westborough Boulevard*
SM	380	W	100	5:00-6:40	At I-280*
SOL	80	Е	220	3:35-6:40	At Carquinez Bridge toll plaza*
SOL	80	Е	840	3:50-5:50	I-680 to Cordelia truck scales
SOL	80	Е	230	4:30-6:30	East of Magellan Road to east of Travis Boulevard*
SOL	680	N	620	3:10-6:35	South of Cordelia Street to I-80*
SON	37	Е	170	3:45-6:10	At Route 121*
SON	101	N	100	4:25-6:05	North of East Washington Avenue*
SON	101	N	120	3:50-6:10	At Old Redwood Highway*
SON	101	N	200	2:10-5:25	South of Route 116 to Golf Course Road
SON	101	N	1,770	1:10-5:35	Route 12 to north of College Avenue
SON	101	S	1,050	2:40-6:10	North of Mendocino Avenue to 5th Street

^{*} Segment monitored in 2003